Unit 2: Estate Skills

Delivery guidance

This is a mandatory unit in all of the pathways for learners studying the International Level 3 in Agriculture, Horticulture or Land-based Subjects. Developing a sound understanding of different estate skills is essential for learners going into the land-based sector. Learners need to fully understand:

- the purpose of different estate skills
- the different methods of carrying out estate skills
- the advantages and disadvantages of carrying out estate skills
- how to carry out estate skills while being considerate of the environment and local habitats.

You should include variety within the sessions to ensure a good knowledge and understanding is achieved, as well as practical skills, and in order that your learners are engaged and motivated. Sessions should include:

- theory lessons with engaging activities
- presentations to ensure knowledge and understanding is secured
- guest speakers to give learners an industry perspective
- demonstrations from you to secure practical techniques
- practical activities allowing learners to carry out estate skills.

Approaching the unit

This unit is integral to all aspects of work in the land-based sector that involve being able to maintain and carry out emergency maintenance. This is very advantageous from a financial perspective, as well as ensuring immediate emergency response.

The focus of the unit is to ensure your learners have the knowledge and skills to complete a variety of estate skills. Practical activities will be essential, both to ensure your learners have a sound understanding, and also to meet some of the assessment criteria.

A range of habitats with varying boundaries, surfaces, structures, services and materials will need to be accessed. In addition to this, personal protective equipment and tools will need to be available for practical activities.

You could begin this unit by discussing the importance of having the understanding and practical skills to carry out estate skills, as these will be required within all areas of the land-based sector. You also need to make your learners aware that much of the assessment for this unit involves them carrying out practical activities and evidencing it.

Your learners can draw on any previous knowledge they may have if they have completed or are completing *Unit 7: Work Experience in the Land-based Sectors*, *Unit 3: Understanding Environmental Management*, *Unit 10: Farm Livestock Husbandry*, *Unit 24: Land-based Workshop Practices* or *Unit 26: Applied Agricultural Farming Practice*.

For learning aim A, you will need to ensure that learners cover the full range of boundaries, surfaces, structures, habitat management, services and materials. This will

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include considering the advantages, disadvantages, costs, installation and maintenance, assessing needs and planning practical activities.

This learning aim requires you to give your learners the opportunity to see a variety of habitats. In addition to this you will need to give them personal protective equipment and tools and equipment to carry out practical activities. Your learners would also benefit from guest lectures to give opinions from industry within the land-based sector.

For learning aim B, you will firstly need to establish that your learners have a thorough understanding of working safely, its importance and the use of personal protective equipment. Then you will need to demonstrate practical activities to ensure learners understand the correct method. Your learners will need to carry out practical activities to ensure they are competent and confident when completing them. Finally, your learners will need to understand the process of reflecting on their personal performance when carrying out practical activities, and its importance in improving future performance. You may find websites such as that of the World Health Organization and those covering occupational safety and health useful.

In learning aim C, learners need to develop the skills to allow them to supervise a workforce. This will allow them to supervise and manage within the workplace once they enter employment in the land-based sector. You could start this learning aim by delivering classroom sessions with some active and engaging activities surrounding who might need to be supervised within the workplace, why and what it will achieve. Moving on from this, you can look at different methods of communication within the workplace, and the advantages and disadvantages of these. Learners could then complete practical activities involving peer supervision, which could include evaluating performance and providing them with feedback.

In addition to this, learners would benefit from employer engagement, perhaps involving guest speakers instructing them on employer expectations. Or you could organise a visit to a workplace where learners could take part in practical activities, with the employer giving them feedback about whether their work meets industry standards and expectations.

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Assessment model

Learning aim	Key content areas	Recommended assessment approach
A Explore estate skills for the management and maintenance of habitats and environments	**A1** The nature and scope of estate skills for land-based sector management **A2** Assessing needs **A3** Planning tasks	A portfolio of evidence that plans for estate management projects. The portfolio should include: • surveys • relevant legislation and codes of practice • a plan, including schedules and specifications.
B Undertake estate skills and their management in the land-based sector	**B1** Working safely **B2** Practical estate tasks **B3** Reflecting on tasks undertaken	Evidence of tasks carried out and reflection on task outcomes, to include: • logbooks, observation records and witness statements of tasks undertaken • a review of task outcomes.
C Carry out the supervision of others engaged in maintenance, repair and installation tasks in the land-based sector	**C1** Workforce supervision **C2** Supervise estate skills undertaken **C3** Evaluate estate skills tasks completed	Evidence of the supervision of others in carrying out tasks, to include: • an evaluation framework that includes task outcome and workforce supervision • observation records and witness statements that demonstrate supervision and management of scheduled tasks • a review of the outcomes of tasks carried out by others • a review of own supervision of a workforce.

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Assessment guidance

This unit is assessed using a number of independent tasks. The recommended assessment approach suggests three different assignments; however, all of these assignments take a very similar approach as much of the assessment within this unit involves gaining portfolio evidence.

A practical workbook could be produced for the learners to ensure all activities are covered and sufficient evidence is collected. When delivering this unit, it is essential that sufficient time is given for practical assessments to take place to give the learners adequate opportunities to gather their evidence.

Within their work, learners will also need to complete reviews, evaluations, plans and surveys. In order to do so, they must work independently and generate their work using a range of appropriate sources. All practical evidence and learner work should be fully authenticated by the tutor.

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Getting started

This gives you a starting place for one way of delivering the unit, based around the recommended assessment approach in the specification.

Unit 2: Estate Skills

Introduction

This unit is essential for any learner going into the land-based sector. It gives learners an understanding of the purpose, methods and skills for carrying out a variety of estate skills, and their advantages and disadvantages.

Learning aim A – Explore estate skills for the management and maintenance of habitats and environments

Learning aim A1

- Ask learners to carry out a paired activity to discuss why estate skills are so important and integral to all aspects of the land-based sector. Learners could consider the different areas of estate management, such as those carried out in forestry, livestock and arable farming.
- Give a presentation about boundaries, their importance and the different types, including animal deterrent fencing, electric fencing, stock fencing, post and rail fencing and decorative fencing. Cover their materials, installation and maintenance.
- Conduct a post-it note activity where learners write their ideas and consider the costs of different boundaries used compared to their longevity. After reviewing initial ideas, have learners use the internet to research sales catalogues and build a real-world picture of purchases.
- Hold a small group activity where learners create a list of the different types of surfaces used in the land-based sector, and the advantages and disadvantages of different surfaces.
- Discuss and demonstrate the advantages and disadvantages of different boundaries, including post and rail, shrub boundaries, electric fencing and strained fencing.
- Discuss the advantages and disadvantages of different surfaces, including woodchip, grassed paths, forest access road and ornamental paving.
- Discuss the benefits and logistics of regular maintenance of greenhouses, field shelters, gates, stalls, troughs, feeders, stiles and signs.
- Invite a guest speaker from a services company to outline the advantages of maintenance and repair of drainage.
- Learners could carry out an activity working in pairs to consider the different structures in their local area. They could produce a table including structure type, uses, materials used, advantages and disadvantages, then go on a walk in the local area completing the table.
- Have a question and answer session about the different methods of habitat management, including weed control, invasive plant control, shrub boundary cutting/layering and providing refuges for wildlife.

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- Have a guest speaker from the industry talk to learners about the different services required in the land-based sector, and their supply, distribution and storage requirements.
- Hold a knowledge quiz about the different materials used within the sector and problems associated with their uses.
- Carry out risk assessment for different areas of a farm/estate identifying key hazards and risks.
- Use a practical activity to teach skills for planning, such as measuring and using maps, diagrams and plans.
- Carry out a paired activity where learners, in pairs, have to write a job list, job plan, tool and equipment list, materials and costings.

Learning aim B – Undertake estate skills and their management in the land-based sector

Learning aim B1

- Begin this learning aim by ensuring that your learners have a thorough understanding of working safely, its importance and the use of personal protective equipment. In order to be confident this has been achieved, get learners to complete worksheets matching personal protective equipment to the correct purposes, and correct methods for using different tools and equipment. You could give learners different examples of PPE and have them show each other how to correctly put it on, ensure it is in working order and maintain it.
- Consider compliance with health and safety regulations, including waste disposal, the transportation of tools and equipment, and the maintenance of tools, equipment and materials.

Learning aim B2

- Demonstrate a variety of different practical activities to your learners to ensure that when they move on to practical work, they will be carrying it out using the correct methods and techniques.
- Have a group discussion about the balance between labour-saving when carrying out practical activities and longevity.
- Instruct learners with tips and advice on how to carry out practical activities efficiently and effectively.
- While carrying out practical work, you will need to schedule time to complete observations, and allow learners to gather evidence such as photos, videos, job sheets, etc.

Learning aim B3

- Have a discussion about reflecting on their personal performance when carrying out practical activities, and the importance of this in improving future performances. This could be evidenced through a filmed event.
- Learners should consider the efficiency of working practices, comparing time and costs – how do these comply with regulations and guidance?
- Propose potential problems that arise during estate management, and have learners develop their problem-solving skills. Teamwork activities could work to establish good communication skills between learners.

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Learning aim C – Carry out the supervision of others engaged in maintenance, repair and installation tasks in the land-based sector

Learning aim C1

- Start this learning aim with a discussion about who would need to be supervised within the workplace, and why supervision is important. Consider different skill sets, such as the internal workforce and external contractors.
- Give a presentation about different methods of communication within the workplace, including their advantages and disadvantages.
- Learners could participate in various role-playing activities or proposed scenarios, considering different types of communication skills, written and oral, and evaluate their use and efficiency.

Learning aim C2

- Do a role-play where learners practise communicating for different situations, such as giving feedback, problem-solving, delegating tasks and in a dispute.
- Arrange for a guest speaker to instruct learners on employer expectations, or a visit to a workplace where learners could take part in practical activities and the employer can give them feedback about whether their work meets industry standards and expectations.

Learning aim C3

- Get learners to work in pairs and complete practical estate skills, where one supervises the other's performance and gives them feedback, before they swap over.
- Have learners create evaluation frameworks, considering compliance with specifications and regulations, and assessing workforce management.
- Practise risk assessments, proposing different scenarios and asking learners what they would consider and how they would go about evaluating risks practically.

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Details of links to other BTEC units and qualifications, and to other relevant units/qualifications

This unit links to:

- Unit 3: Understanding Environmental Management
- Unit 7: Work Experience in the Land-based Sectors
- Unit 10: Farm Livestock Husbandry
- Unit 24: Land-based Workshop Practices
- Unit 26: Applied Agricultural Farming Practice
- Unit 30: Tree and Shrub Pruning and Maintenance.

Resources

In addition to the resources listed below, publishers are likely to produce Pearson-endorsed textbooks that support this unit of the BTEC International Qualifications in Agriculture, Horticulture and Land-based Subjects. Check the Pearson website (http://qualifications.pearson.com/endorsed-resources) for more information as titles achieve endorsement.

Textbooks

Bromley, P – *Countryside Management* (Routledge, 1990) ISBN 9780419151401. This text will be useful for habitat management skills, and also some of the skills and techniques covered throughout other aspects of the unit.

Garrod, G – *Strategic Countryside Management* (Elsevier Science, 2005) ISBN 9780080438894. This text will be useful for outlining different skills and techniques throughout much of the unit.

Keirle, I – *Countryside Recreation Site Management: A Marketing Approach* (Routledge, 2002) ISBN 9780415248853. This text will be useful for outlining different skills and techniques throughout much of the unit.

Rackham, O – *Woodlands* (William Collins, 2015) ISBN 9780008156916. This text will be useful for outlining different skills and techniques throughout much of the unit.

Starr, C – *Woodland Management: A Practical Guide* (The Crowood Press, 2013) ISBN 9781847976178. This text will be useful for outlining different skills and techniques throughout much of the unit.

Sutherland, WJ – *Managing Habitats for Conservation* (Cambridge University Press, 1995) ISBN 9780521447768. This text will be useful for outlining different skills and techniques throughout much of the unit.

Dorling Kindersley – *The Business Book: Big Ideas Simply Explained* (Dorling Kindersley, 2014) ISBN 9781409341260. This text will be useful for outlining different communication methods, and for the supervising and evaluating aspects of the unit.

Journals

International Journal of Rural Management – a useful journal that will allow learners to read about different techniques and their success around the world.

Land – Open Access Journal – a useful journal that will allow learners to read about different techniques and their success around the world.

Websites

Visit the Wildlife Conservation Society website, which outlines endangered species around the world and different habitat management techniques, their advantages and disadvantages.

Visit the International Union for Conservation of Nature website for an outline of different conservation strategies around the world and their successes.

Pearson is not responsible for the content of any external internet sites. It is essential for tutors to preview each website before using it in class so as to ensure that the URL is still accurate, relevant and appropriate. We suggest that tutors bookmark useful websites and consider enabling students to access them through the school/college intranet.

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